

WHAT IS CLAIMED IS:

1. An apparatus for locating an opening in tissue, comprising:
an elongated member having a lumen formed therein and having a vacuum
source attached for conveying a vacuum through said lumen, said elongated member
5 having a vacuum port adjacent the distal end of said elongated member, said vacuum
port positioned on said opening and withdrawing body liquid therethrough and through
said lumen.
2. The apparatus of Claim 1, further comprising a body fluid visualization
port adjacent the proximal end of said elongated member.
- 10 3. The apparatus of Claim 2 wherein said visualization port is a blood
visualization port.
4. The apparatus of Claim 1, wherein the elongated member defines a distal
axial opening in communication with the vacuum lumen, the distal axial opening
comprising the vacuum port.
- 15 5. An apparatus for locating an opening in tissue, comprising:
a suction catheter having a distal end and a proximal end;
a suction port positioned near said distal end of said suction catheter; and
a fluid detection port position near the proximal end of said suction catheter.
- 20 6. The apparatus of Claim 5, wherein said fluid detection port comprises
means for determining the nature of the fluid from said opening to determine the
location of said opening.
7. The apparatus of Claim 5, further comprising a tissue modifying
apparatus adjacent said distal end of said suction catheter.
- 25 8. The apparatus of Claim 7, wherein said modifying apparatus comprises a
closure device for closing said opening.
9. The apparatus of Claim 7, wherein said modifying apparatus comprises a
device for enlarging said opening.
10. The apparatus of Claim 7, wherein said modifying apparatus comprises a
tissue therapy device.
- 30 11. The apparatus of Claim 5, wherein said suction port comprises an edge
eversion device for said opening.

12. The apparatus of Claim 5, further comprising a suction catheter holding device for maintaining the position of said catheter on said opening.

13. The apparatus of Claim 5, wherein said suction port comprises the distal opening of said suction catheter.

5 14. A method for modifying an opening in tissue, comprising:
applying a vacuum to the tissue adjacent the opening; and
modifying the tissue adjacent the tissue opening.

15. The method according to Claim 14, wherein modifying the tissue adjacent the tissue opening comprises everting the edges defining the opening.

10 16. The method according to Claim 14, wherein modifying the tissue adjacent the tissue opening comprises therapeutically treating the tissue.

17. The method of Claim 14, further comprising maintaining the vacuum to hold a modifying catheter in place on the opening.

15 18. A method for locating a vessel opening in a blood vessel, comprising the steps of:

applying a vacuum to the general area surrounding a vessel opening such that a mixture of blood and clear bodily fluid is suctioned; and

applying the vacuum closer to the vessel opening such that less clear bodily fluid and more blood is suctioned; and

20 applying the vacuum completely over the vessel opening such that only blood is suctioned; and

applying a vacuum to the vessel opening such that vessel edge portions defining the vessel opening assume an everted condition.

25 19. The method according to Claim 18, including the step of providing an instrument having a guidewire guide that guides the instrument toward the vessel opening.

20. A device to facilitate the closure of wounds in the vasculature of a patient comprising:

30 a body portion having a retracting portion having two movable halves extending away from and substantially perpendicular to said body portion, said halves forming a channel extending completely through said retracting portion; and

a handle portion connected to said body portion which controls the movement of the two movable halves.

21. The device of Claim 20, wherein said handle portion comprises two handles and a locking mechanism.

5 22. The device of Claim 21, wherein the device is formed of a first and second member connected by a hinge, and one movable retracting portion half and one handle half is disposed on each member.

 23. The device of Claim 22, wherein the handle portion and hinge are adapted so that movement of the retracting portion halves toward each other is effected
10 by moving the handles away from each other.

 24. The device of Claim 21, wherein the locking mechanism comprises a toothed arcuate stop member extending from the first handle and a release member extending from a second handle, and the release member includes a stop adapted to releasably engage the stop member teeth.

15 25. The device of Claim 21, wherein the handles are biased away from each other.

 26. The device of Claim 24, wherein the release member stop is biased into engagement with the stop member teeth.